AMENDMENTS TO THE CLAIMS

1-39. (Canceled)

40. (Currently Amended) A method for determining ~~an electrotherapeutic~~ drug efficacy ~~effect~~, comprising:

a) providing;

i) a patient exhibiting ~~an abnormal~~ first electroencephalogram; and

ii) a drug; and,

b) converting said first electroencephalogram to ~~abnormal quantified neurophysiologic information, wherein said abnormal information comprises~~ at least one first multivariate outcome measurement, wherein said first multivariate outcome measurement is derived from a frequency band selected from the group consisting of delta, theta, alpha, and beta;

c) administering said drug to said patient;

d) obtaining a second electroencephalogram from said patient[['s]] ~~follow-up neurophysiologic information~~ and converting said second electroencephalogram to at least one second multivariable outcome measurement, wherein said second multivariate outcome measurement is derived from a frequency band selected from the group consisting of delta, theta, alpha, and beta; and

e) comparing said ~~abnormal information~~ first multivariate outcome measurement with said second ~~follow-up information~~ multivariate outcome measurement wherein a difference is identified ~~under conditions such that said multivariate measure is differentially changed~~.

41. (Currently Amended) A method according to claim 40, wherein said comparing comprising using ~~uses~~ a reference database.

42. (Currently Amended) A method according to claim 40, wherein said ~~differentially changed~~ difference between said first multivariate outcome measurement and second follow-up multivariate outcome measurement is proportional to the efficacy of said drug ~~identifies an electrotherapeutic drug effect~~.

43-49. (Canceled)

50. (New) The method of Claim 40, wherein said delta frequency band comprises a first set of univariate measurements selected from the group consisting of absolute power, relative power, coherence, and symmetry.

51. (New) The method of Claim 40, wherein said theta frequency band comprises a second set of univariate measurements selected from the group consisting of absolute power, relative power, coherence, and symmetry.

52. (New) The method of Claim 40, wherein said alpha frequency band comprises a third set of univariate measurements selected from the group consisting of absolute power, relative power, coherence, and symmetry.

53. (New) The method of Claim 40, wherein said beta frequency band comprises a fourth set of univariate measurements selected from the group consisting of absolute power, relative power, coherence, and symmetry.

54. (New) A method for determining drug efficacy, comprising:

a) providing;
   i) a patient exhibiting a first electroencephalogram; and
   ii) a drug; and,

b) converting said first electroencephalogram to at least one first multivariate outcome measurement, wherein said first multivariate outcome measurement is derived from a frequency band ranging from approximately 0.5 – 35 Hertz;

c) administering said drug to said patient;

d) obtaining a second electroencephalogram from said patient and converting said second electroencephalogram to at least one second multivariable outcome measurement, wherein said second multivariate outcome measurement is derived from a frequency band ranging from approximately 0.5 – 35 Hertz; and

e) comparing said first multivariate outcome measurement with said second multivariate outcome measurement wherein a difference is identified.

55. (New) A method according to claim 54, wherein said comparing comprising using a reference database.

56. (New) A method according to claim 54, wherein said difference between said first multivariate outcome measurement and second follow-up multivariate outcome measurement is proportional to the efficacy of said drug.

57. (New) A method for determining drug efficacy, comprising:

a) providing;

i) a patient exhibiting first electroencephalogram;

ii) a drug;

iii) a first symtomatic behavioral assessment;

and

b) converting said first electroencephalogram to at least one first multivariate outcome measurement, wherein said first multivariate outcome measurement is derived from a frequency band selected from the group consisting of delta, theta, alpha, and beta;

c) administering said drug to said patient;

d) obtaining a second clinical assessment of said patient; and

e) comparing said first symtomatic behavioral assessment with said second symptomatic behavioral assessment wherein an improvement is identified.

58. (New) The method of Claim 57, further comprising, identifying said at least one multivariate outcome measurement in at least a second patient.

59. (New) The method of Claim 57, wherein said drug is desiprimine.

60. (New) The method of Claim 57, wherein said multivariate outcome measurement is relative power monopolor posterior alpha.